



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/613,996

07/08/2003

Yennun Huang

33081/US/2

6243

38598

7590

12/09/2008

ANDREWS KURTH LLP

1350 I STREET, N.W.

SUITE 1100

WASHINGTON, DC 20005

EXAMINER

OSMAN, RAMY M

ART UNIT

PAPER NUMBER

2457

MAIL DATE

DELIVERY MODE

12/09/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/613,996	<b>Applicant(s)</b> HUANG ET AL.	
	<b>Examiner</b> RAMY M. OSMAN	<b>Art Unit</b> 2457	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-8-11,13,14,16,18-21,23-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-8-11,13,14,16,18-21,23-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Status of Claims***

1. This action is responsive to amendment filed on August 29, 2008, where applicant amended claims 1,5,8,10,14,16,18,19,21,23,24,26. Claims 1,3,5-8-11,13,14,16,18-21,23-27 are pending.

### ***Response to Arguments***

2. Applicant's arguments filed 8/29/08 have been fully considered and are only partially persuasive.

3. In light of amendments, the previous claim objections are withdrawn, and the non-statutory rejection of claims 14 and 21 is withdrawn.

4. Applicant acknowledges that the input parser 902 of Liao performs “*comparing extracted data...*”, however argues that the output parser 904 of Liao does not teach the “*comparing*” step, and therefore does not satisfy the limitation of “two or more attribute filters”.

***In reply***, it is only the input parser 902 that was relied upon to establish the “*comparing*” step. Liao teaches that the output parser performs the comparing step and has within it the claimed “*two or more attribute filters*”. The parser performs lexical scanning (i.e. of extracted data) via pattern matching (i.e. comparing) which results in identifying multiple lexical token identifiers. (column 13 line 60 – column 14 line 15, and column 14 lines 34-44) The output parser of Liao is not relied upon to teach the comparing step.

5. Applicant acknowledges that “*it may be argued that the input parser 902, which processes input traffic and makes the queuing decisions, may inherently possess a set of events*

Art Unit: 2457

*that a subscriber is interested in receiving from publishers*”, however argues that the output parser 904 does not have that feature.

***In reply***, the amended limitation of where each “*filter describes a set of events that a subscriber is interested in receiving from publishers*” is not taught by Liao. However, as acknowledged by Applicant, it may be easily argues that the input parser of Liao includes filtering the extracted data based upon subscriptions in a publish-subscribe model. A 103 rejection is presented below.

6. Applicant argues that Liao fails to teach “determining a quality of service guarantee for the packet; and selectively routing...” as claimed and as described in Applicants specification on pages 40-41.

***In reply***, it is noted that the features upon which applicant relies (i.e., pgs 40-41 of Applicants specification) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicants claim language of “selectively routing” is broad and is simply interpreted to mean packet routing/handling (as taught by Liao, see column 2 lines 33-38 and column 14 lines 40-43). The particular example given by the Applicant (at the bottom of page 10 of Applicants Remarks) is not read into the claims.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2457

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**8. Claims 1,3,5-7,14,16,18-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Liao (US Patent No 7,188,168) in view of Mutreja (US Patent No 7039050).**

9. In reference to claims 1 and 14, Liao teaches a method and apparatus respectively for routing packets in a network in conjunction with a quality of service guarantee, comprising:

receiving a packet having a header section and a payload section (column 14 lines 34-36);

inspecting the payload section of the packet in a network core as a prelude to routing the packet, the step of inspecting, comprising; extracting data attributes from the payload section; (column 14 lines 34-39)

comparing the extracted data attributes to two or more attributes filters, and if the comparing step indicated that each of the two or more attributes filters is satisfied, performing a set of functions; (column 13 line 60 – column 14 line 15 and column 19 lines 5-25),

determining a quality of service guarantee for the packet; and selectively routing the packet based upon the inspecting and the quality of service guarantee (column 2 lines 33-38 and column 14 lines 40-43)

(In the above citations, Liao discloses lexical scanning of a packet by the parser which performs pattern matching resulting in identifying multiple lexical token identifiers. The packet is then handled (i.e. selectively routed) by a routing device based on the identifiers. Liao discloses “policy based routing” which is equivalent to the claimed “quality of service).

Although Liao does teach filtering, Liao fails to explicitly teach wherein each attributes filter describes a set of events that a subscriber is interested in receiving from publisher.

Art Unit: 2457

However, Mutreja teaches a publish/subscribe model where messages are routed based upon message subscriptions for the purpose of facilitating intelligent message routing to the appropriate subscriber (column 4 lines 12-34). A “subscription” is inherently an event that a subscriber is interested in receiving from a publisher. Furthermore, Applicants admit (in page 10 of remarks dated 8/29/08) that it would be obvious for the input parser of Liao to include events that a subscriber is interested in. It therefore would have been obvious for one of ordinary skill in the art to modify Liao by including the publish-subscribe model as part of the attribute filters as per the teachings of Mutreja for the purpose of message routing based upon subscriber interest.

10. In reference to claims 3 and 16, Liao teaches the method and apparatus of claims 1 and 14, further including performing the inspecting step at a router in the network core (column 16 lines 1-2).

11. In reference to claims 5 and 18, Liao teaches the method and apparatus of claims 4 and 17, further including propagating the filter to a router in the network for use in performing the inspecting (column 19 lines 40-47).

12. In reference to claims 6 and 19, Liao teaches the method and apparatus of claims 1 and 14, further including programming a router in the network for performing the receiving, inspecting, and routing steps (column 19 lines 40-47).

13. In reference to claims 7 and 20, Liao teaches the method and apparatus of claims 1 and 14, wherein the set of functions includes determining how to route the packet or whether to drop the packet altogether (column 14 lines 40-43).

Art Unit: 2457

**14. Claims 8,10,11,13,21,23,24,26,27 rejected under 35 U.S.C. 103(a) as being unpatentable over Liao (US Patent No 7,188,168) in view of Mutreja (US Patent No 7039050) in view of Banavar et al (US Patent No 7,050,432).**

15. In reference to claims 8,10,11,13,21,23,24,26,27, these are claims that correspond to the above claims 1,3,5-7,14,16,18-20. Claims 8,10,11,13,21,23,24,26,27 are substantially similar to the above claims and are rejected based upon the same rationale as given for claims 1,3,5-7,14,16,18-20 above.

However, Liao fails to explicitly teach subscription based services. Banavar teaches publish/subscribe based services that utilizes content based routing for the purpose of facilitating reliable message delivery (column 1 lines 27-34 and column 4 line 57 – column 5 line 12). It would have been obvious for one of ordinary skill in the art to modify Liao as per the teachings of Banavar for the purpose of facilitating reliable message delivery.

### ***Conclusion***

16. The above rejections are based upon the broadest reasonable interpretation of the claims. Applicant is advised that the specified citations of the relied upon prior art, in the above rejections, are only representative of the teachings of the prior art, and that any other supportive sections within the entirety of the reference (including any figures, incorporation by references, claims and/or priority documents) is implied as being applied to teach the scope of the claims.

17. Applicant may not introduce any new matter to the claims or to the specification. For any subsequent response that contains new/amended claims, Applicant is required to cite its corresponding support in the specification. **(See MPEP chapter 2163.03 section (I.) and chapter 2163.04 section (I.) and chapter 2163.06)**

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached Form 892.

Art Unit: 2457

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAMY M. OSMAN whose telephone number is (571)272-4008. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 2457

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ramy M Osman/  
Primary Examiner (Temp), Art Unit 2457

December 3, 2008